

NOTES ON MIKANIA (COMPOSITAE) - VI

Walter C. Holmes
Institute for Botanical Exploration
and
Dept. Biological Sciences, Northwestern State
University of Louisiana, Natchitoches, Louisiana

and

Sidney McDaniel
Institute for Botanical Exploration
Mississippi State, Mississippi

Continued studies in Mikania (Eupatorieae) have resulted in the following notes which propose two new species and clarify the status of another name. This will be the final note preparatory to completion of the treatment of Mikania for Perú.

MIKANIA DUDLEYI Holmes & McDaniel, sp. nov.

Suffrutex volubilis; foliis ovato-oblongis, ad 13 cm longis et 6 cm latis, apice attenuatis, basi anguste cordatis, subpinnatinervis; inflorescentiis paniculatis, ca 12 cm longis et 7 cm longis; capitulis 6 mm longis; corollis 3.5 mm longis, dentibus limbi late triangularibus, achaeniis ca 1.5 mm longis; pappi setis ca 30, ca 4.5 mm longis, barbellatis.

Subligneous liana, stems terete, costate-striate, glabrate, internodes to 18 cm long. Leaves ovate-oblong, coriaceous, dark green, glossy to 13 cm long and 6 cm wide, margins entire to remotely and obscurely denticulate, apices attenuate, bases narrowly cordate (bracteal leaves subcordate to truncate), upper surfaces glabrate to puberulent, glandular, subpinnately nerved from near the base with two pairs of secondary nerves separating within 1 cm of the base thence arching toward the apex, tertiary veins exserted, transverse, lower surfaces puberulent, glandular, veins exserted, petiole to 2.5 cm long, thickish. Inflorescence a panicle, to ca 12 cm long and 7 cm in diameter, branchlets terete, crisp-puberulent, pedicels ca 1 mm long, terete, puberulent. Heads ca 5-6 mm long, exterior bract linear-lanceolate, ca 1.5 mm long, puberulent, borne at the base of the pedicel. Involucral scales linear to elliptic-oblong, ca 4 mm long, puberulent, apices somewhat acute, densely puberulent-pilose. Corolla violet, ca 3.5 mm

long, glandular, tube ca 1.3 mm long, throat campanulate, ca 2.3 mm long, teeth broadly triangular, ca 0.6 mm long, glandular, puberulent. Achene (immature) ca 1.5 mm long, brownish. Pappus bristles ca 30, white, ca 4.5 mm long, barbellate, thickened at the tips.

TYPE: PERU. Cuzco. La Concepción, exposed steep ridges at top of old landslide below Camp 5, ca 2800 m, July 9, 1968, T. R. Dudley 10913 (US, holotype).

Mikania dudleyi is characterized by ovate leaves with narrowly cordate bases. Venation is subpinnate, with two pairs of secondary nerves separating within about one centimeter of the point of insertion of the petiole. Tertiary veins are prominent and transverse. Surfaces of the leaves are uniformly glandular, with the lower surfaces puberulent. The exterior bract is borne well beneath the involucre. The corolla is violet in color, glandular, and has corolla teeth that are broadly triangular and much shorter in length than the throat.

This species, which is known only from the type, does not appear to resemble any known Peruvian species of Mikania.

MIKANIA SHUSHUNENSIS Holmes & McDaniel, sp. nov.

Suffrutex volubilis; foliis lanceolatis vel ovatis, attenuatis, ad 10 cm longis et 4.5 cm latis, basi cuneatis, pinnatinervis; inflorescentiis paniculatis, ad 15 cm longis et 7 cm latis; capitulis 6 mm longis; corollis 4 mm longis, dentibus limbi lanceolatis; achaeniis ca 1.8 mm longis; pappi seti ca 30-35, ca 4.5 mm longis, scabridis.

Liana, stems terete, costate, glabrous, pithy, internodes to ca 7 cm long. Leaves lanceolate to ovate, to 10 cm long and 4.5 cm wide, apices attenuate, bases cuneate, margins entire, pinnately nerved, surfaces glabrous, lower prominently reticulate, petiole ca 1.5 mm long, glabrous. Inflorescence a panicle, to ca 15 cm long and 7 cm in diameter, branchlets puberulent. Heads somewhat racemosely disposed, ca 6 mm long, exterior bract linear, ca 3 mm long, puberulent, borne at the base of the pedicel. Involucral scales lanceolate, ca 5 mm long, glabrate, apices acute, puberulent. Corolla white, ca 4 mm long, tube gradually expanding into and scarcely distinguishable from the throat, teeth lanceolate, ca 1.2 mm long. Achene (immature)

ca 1.8 mm long. Pappus bristles ca 30-35, ca 4.5 mm long, brownish near the base, gradually turning white and enlarged toward the tip, scabrid.

TYPE: PERU. Loreto. Prov. Maynas. Dtto. Iquitos. Carretera de Zungaro Cocha near Quebrada de Shushuna, September 20, 1978, Manuel Rimachi Y. 3984 (IBE, holotype; AMAZ, F, NATC, US, USM, isotypes).

This new species is characterized by its paniculate inflorescence with heads somewhat racemously disposed toward the tips of the branches. The exterior bracts are linear and borne at the very base of the pedicel. Pappus bristles are bicolored, the bases being tawny or brownish, the tips white and enlarged. The plant apparently turns brownish upon drying.

Comparison with other Peruvian species of *Mikania* has revealed that two other species turn brownish upon drying, *M. stygia*, a plant with ternately disposed heads, and *M. iquitoensis*, a plant certainly with close affinities to *M. shushunensis*. The cuneate leaf bases, corolla with tube and throat scarcely distinguishable, and lanceolate corolla teeth, among other differences suffice to distinguish this plant from *M. iquitoensis* which has acute to obtuse leaf bases, campanulate-turbinate corolla throat, and deltoid corolla teeth.

Other than in turning brown in drying, the leaves of this species are almost exactly like those of *Mikania aschersonii* Hieron. However, that species is easily recognized by its corymbose inflorescence. The habitat of this species is a somewhat disturbed high white sand area notable for interesting species. It was observed in sterile condition in November, 1979, at the type locality. *Mikania shushunensis* was noted at that time to occur in a somewhat open savanna in slightly elevated tussocks of *Trichomanes* and *Adiantum*. Additional material will be collected for distribution. Shushuna is lowland Quechua for sieve.

MIKANIA WEBERBAUERI Hieron., Bot. Jahrb. Syst. 11: 389. 1908. Perú. Huánuco. Huamillies, Monzon, 100-1000 m, July 23, 1903, Weberbauer 3426 (B, holotype, not seen, F, GH, photos).

M. rivularis Robins., Contr. Gray Herb. 73: 30. 1924. Perú. Junín, La Merced, 2000 ft., August 10-24, 1923, Macbride 5414 (F, holotype).

Mikania weberbaueri is known only from the type specimen at Berlin (B) presumed destroyed. Robinson (1922) characterized the plant as having ovate-oblong leaves with long tapering apices, a panicle of somewhat dense glomerules, and pappus bristles distinctly thickened at the summit. He also reported it seemed near M. tambillensis, a species lacking the long tapering leaf apices, but having a shorter stalked inflorescence and pappus bristles not thickened upwards. The species appear to be satisfactorily distinct, at least from the sparse material available for study.

However, difficulty was encountered in separating Mikania weberbaueri and M. rivularis. Clear photos of the type (F, GH) and a line drawing with pencil notations, distinctly in the hand of B. L. Robinson, were available of M. weberbaueri and enabled a somewhat detailed comparison to be made. The leaves of both are identical in texture, margins, venation, types of bases, and even to the long tapering apices. As noted on the drawing of M. weberbaueri and from examination of the type of M. rivularis, both are glabrous. The dense corymbose inflorescences are identical. Robinson (1922) describes M. weberbaueri as having sessile heads, but examination of the photos showed heads both sessile and pedicellate, as occurs in the type material of M. rivularis. Both plants closely agree in characters of exterior bracts and phyllaries. Robinson further describes the corolla of M. weberbaueri as "tube not enlarged upward," which is also true of M. rivularis. Pappus bristles of both are distinctly enlarged at the summit. It readily becomes apparent under detailed comparison that the two plants cannot be adequately separated, therefore only the older name is retained, M. weberbaueri.

LITERATURE CITED

- Robinson, B. L. 1922. The mikanias of northern and western South America. Contr. Gray Herb. 64: 21-116.